

[See source for graphic]

AMENDED PAGE

[See source for illustration]

7d Zitronenapfel

UVA/white, UVB, blue/white, UVB/white

a>

7d Golden Delicious

UVA/white, UVB, blue/white, UVB/white

b>

Fig. 2

AMENDED PAGE (RULE 26)

Fig. 3 Post-Reddening of Apples in Storage after  
Irradiation

[See source for chart]

Distance 527.5 mm

□ immediately  
x after storage

Duration after storage  
7 days, Pilot variety

Irradiation Period [hrs]

[Following 3 pages already provided in source and target languages]

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AREA OF PATENT LAW  
**PCT**  
INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(Article 36 and Rule 70 PCT)

File No. of applicant or attorney  
2876-1 PCT-1

See notice of submittal of the international  
preliminary examination report (form sheet  
PCT/IPEA/416)

FURTHER ACTION

International File No.  
PCT/DE00/00068

International Application Date (day/month/year)  
11/01/2000

Priority Date (day/month/year)  
11/01/1999

International Patent Classification (IPK) or national classification and IPK  
A01G7/04

Applicant  
SCHERER, Günther

1. This international preliminary examination report was issued by the office ordering the international preliminary examination and is forwarded to the applicant in accordance with Article 36.
2. This REPORT includes a total of 5 sheets including this cover sheet.

x Furthermore, ENCLOSURES are attached to this report, those are sheets containing descriptions, claims, and/or drawings which were amended, and are the basis of this report, and/or the sheets containing corrections made by this office (see Rule 70.16 and Section 607 of the Administrative Guidelines for the PCT).

These enclosures contain a total of 11 sheets.

3. This report contains information on the following items:
  - I      x Basis of the report
  - II     ☐ Priority
  - III    ☐ No compilation of an expert opinion on innovation, inventive activity, and commercial applicability

- IV    ☐ Lacking uniformity of the invention
- V     ☒ Justified determination in accordance with Article 35(2) regarding innovation, inventive activity, and commercial applicability; documents and explanations supporting this determination
- VI    ☐ Certain referenced documents
- VII   ☐ Certain inadequacies with the international application
- VIII ☒ Certain remarks regarding the international application

Date of Application Submittal  
07/29/2000

Date of Completion of this Report  
05/07/2001

Name and postal address of the office  
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Examination:

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**I. Basis of the Report**

1. Regarding the **components** of the international application (*amendment pages, which were submitted to the application office on request according to Article 14, are considered "originally submitted" within the scope of this report, and are not attached, because they contain no changes (Rules 70.15, and 70.17)*): **Description, pages:**

9-24                      original version

1-3, 3a, 4-8      received on      03/16/2001      by letter dated 03/13/2001

**Patent claims, No.:**

1-12                      received on      03/18/2001      by letter dated 03/13/2001

**Drawings, sheets:**

1/3-3/3                      original version

2. Regarding the **language**: All components named above were made available to the office in the language in which the international application was submitted, or were submitted in this language, as far as no other provisions have been made under this item.

The components were made available to the office in language:      or were submitted in this language, they are

- ☐ the language of the translation, which was submitted for purposes of an international search (according to Rule 23.1(b)).
- ☐ the publication language of the international application (according to rule 48.3(b)).
- ☐ the language of the translation, which was submitted for purposes of an international preliminary examination (according to Rule 55.2 and/or 55.3).

3. Regarding the **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination has been performed on the basis of the sequence protocol, which:

- ☐ contained in the international application in writing.
- ☐ was submitted together with the international application in computer-readable form.
- ☐ was later submitted to the office in writing.
- ☐ was later submitted to the office in computer-readable form.

- ☐ The statement declaring that the written sequence protocol submitted late does not exceed the disclosure content of the international application at the time of application, has been submitted.
- ☐ The statement that the information compiled in computer-readable form comply with the written sequence protocol, was submitted.



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4. The following documents were excluded due to the changes:

- ☐ Description,            pages:
- ☐ Claims,                No.:
- ☐ Drawings,            sheet:

5. ☐ This report has been issued without consideration of (some) changes, because according to the office's opinion, they exceed the disclosure content of the originally submitted version (rule 70.2)) for the states reasons.

(Any amendment pages containing such changes must contain a reference to such changes under item 1; they must be included with this report).

6. Any additional remarks:

**V. Justified determination according to article 35(2) regarding the innovation, inventive activity, and the commercial applicability; documents and statement aiding in this determination**

1. Determination

Innovation (N)	Yes: Claims 1 – 12
	No: Claims
Inventive Activity (ET)	Yes: Claims 1 – 12
	No: Claims
Commercial Applicability (GA)	Yes: Claims 1 – 12
	No: Claims

2. Documents and Statements  
**See supplemental sheet**

**VII. Certain remarks about the international application**

For the clear understanding of the patent claims, description and drawings, or of the question whether the claims are supported fully by the description, the following is noted:  
**See supplemental sheet**

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EXAMINATION REPORT-SUPPLEMENTAL SHEET  
International File No. PCT/DE00/00068

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ad Section V:

1. about the Innovation:

Publication D1, Physiologia Plantarum, Bd.64, 1985, XP000911121, pages 323, 324, left column, 325, right column, 328, right column, next to last paragraph to page 327, first paragraph, is considered the closest applicable state of technology. D1 discloses a method for promoting the anthocyanin coloration in naturally red-colored apples (Jonathan variety) by irradiation of the fruit with UVB light (312nm), or a mixture of UVB and white light.

D1 does not disclose a method for inducing a red coloration by anthocyanin in plants and fruit, which do not naturally turn red, nor such plants or fruit.

Claims 1 through 12 therefore meet the requirements of Article 33(2) PCT.

2. about the inventive activity:

The task solved by the method according to claim 1 consists of inducing the anthocyanin coloration in plants or fruit, which normally do not develop a red coloration, thereby producing plants or fruit with a red coloration.

Although it is known from D1 that the natural anthocyanin coloration in normally red fruit can be promoted, the cited state of technology does not indicate that this is also possible in plants and fruit, which normally maintain a green coloration.

Claims 1 and 12 therefore meet the requirements of Article 33(3) PCT.

The related claims 2 through 11 refer to special examples of the method according to claim 1, and therefore

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meet the requirements by the PCT.

3. The commercial applicability of the subject of claims 1 through 12 is obvious.

ad Section VIII:

Claim 1 does not meet the requirements of Article 6 PCT, because the wording includes “on non red-colored stored fruit” type of fruit, which would be red under normal ripening conditions, und did not turn red only because it was harvested early. This is in contradiction to the task presented, of promoting the anthocyanin production in plants or fruit, which normally do not turn red.